



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,579	09/17/2003	Gregory Clegg Spooner	14053.41.0	3671
22859	7590	09/02/2005	EXAMINER	
INTELLECTUAL PROPERTY GROUP			CHIN, RANDALL E	
FREDRIKSON & BYRON, P.A.			ART UNIT	PAPER NUMBER
200 SOUTH SIXTH STREET			1744	
SUITE 4000				
MINNEAPOLIS, MN 55402				

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

KL

Office Action Summary	Application No.	Applicant(s)
	10/664,579	SPOONER, GREGORY CLEGG
	Examiner	Art Unit
	Randall Chin	1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-15 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: particle of dirt D (p. 7, line 15).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1, 5 and 7 are objected to because of the following informalities:

Claim 1, line 3, with respect to what is "a lowermost region" referring to?

Claim 5 depends on itself.

Claim 5, line 3, "said deflector" lacks proper antecedent basis.

Claim 7, lines 8-9, with respect to what is "an angular distance" referring to?

Compare with claim 1, lines 3-5.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-7 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaulig '025.

As well as claim 1 is understood, Kaulig '025 discloses in Fig. 2 a sweeping appliance comprising a housing which would have a dirt receiving opening, a rotary brush defining a plurality of bristles 10, a lowermost region (of the brush) touching a surface to be cleaned, wherein deflecting means 1 are arranged adjacent the brush and extending into the bristles at an angular distance from the point at which the bristles touch the surface to be cleaned so that as the brush rotates, bristles are inherently held behind the deflecting means until their resilience causes them to spring back past the deflecting means (col. 2, lines 8-18). The provision of rollers to merely support the housing is old and well known in the sweeping device art and well within the competence of one of ordinary skill to merely add more support and improved mobility for the housing.

As for claim 4, the deflecting means 1 is a blade-like edge or member unitarily formed to the housing (col. 2, lines 8-11).

As for claim 5, the blade-like member is still disposed to engage the bristles so that they move through an angular distance of about 90 degrees (actually, the bristles of Kaulig move a continuous angular distance) as they spring past the deflecting means.

As for claim 6, the rotary brush comprises a central member 6 from which the bristles 10 radially extend (Fig. 1).

As well as claim 7 is understood, Kaulig '025 discloses a sweeping appliance in Fig. 2 comprising a housing which would have a dirt receiving enclosure and a dirt receiving opening, the opening being formed in the housing and leading to the dirt receiving enclosure, a lower region of the housing configured to contact the surface to be cleaned, a rotary brush 10 provided proximate the dirt receiving opening, the brush defining a plurality of resilient bristles, a deflector 1 provided adjacent the brush (Fig. 2) and extending into the bristles at an angular distance, the deflector being configured to halt the progress of the bristles until the brush rotates sufficiently to force the bristles forward of the deflector, the resilience of the bristles causing them to spring forward of the deflector (col. 2, lines 8-18). The provision of rollers to merely support the housing is old and well known in the sweeping device art and well within the competence of one of ordinary skill to merely add more support and improved mobility for the housing.

As for claims 10 and 11, the deflecting means 1 is a blade-like edge or member unitarily formed to the housing (col. 2, lines 8-11).

As for claim 12, the blade-like member is can also be joined to the housing (col. 2, lines 8-11).

As for claim 13, the blade-like member is still disposed to engage the bristles so that they move through an angular distance of about 90 degrees (actually, the bristles of Kaulig move a continuous angular distance) as they spring past the deflecting means.

As for claim 14, the rotary brush comprises a central member 6 from which the bristles 10 radially extend (Fig. 1).

5. Claims 2, 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaulig '025 in view of Keller '659.

Kaulig '025 teaches all of the recited subject matter with the exception of roller means comprising a first pair of wheels and a second pair of wheels all engaging a surface to be cleaned and the rotary brush being coaxial with and connected to the first pair of wheels to rotate therewith. Keller '659 teaches a sweeping appliance comprising roller means comprising a first pair of wheels 14, 14 and a second pair of wheels 18, 18 all engaging a surface to be cleaned and a "rotary brush" 28 being coaxial with and connected to the first pair of wheels 14, 14 to rotate therewith (Figs. 1 and 2). It would have been obvious to one of ordinary skill to have provided Kaulig's appliance with roller means comprising a first pair of wheels and a second pair of wheels all engaging a surface to be cleaned and the rotary brush being coaxial with and connected to the first pair of wheels to rotate therewith as taught by Keller '659 to add mobility and stability to the sweeping appliance.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaulig '025 in view of Worwag '939.

Kaulig '025 teaches all of the recited subject matter with the exception of a lower region of the housing bent downward to form a ramp. Worwag '939 teaches a lower region of a housing bent downward to form a ramp 30 (Fig. 2). It would have been obvious to one of ordinary skill to have provided Kaulig's sweeping appliance with a ramp bent downwards as taught by Worwag to facilitate the sweeping up of debris.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Ferris, Rosendall, McDowell, Andersen, France '024, Italy '633, and Canada '063 are relevant to various sweeping appliance arrangements.

8. Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, John Kim, can be reached at (571) 272-1142. The number for Technology Center 1700 is (571) 272-1700.

The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


R. Chin


Randall Chin
Primary Examiner
Art Unit 1744